CONSUMER SEGMENTATION IN THE FASHION INDUSTRY

Evaluation of consumer segmentation models in Europe and the USA and their future relevance for fashion companies

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Abstract

Purpose of this research paper is to assess the state of the art concerning the relevance of consumer segmentation models in the fashion industry with regards to current changes in technology, market structure and consumer behavior.

The paper is composed of a qualitative literature review and an empirical study in form of a survey. They are contrasted in order to identify both similarities and differences.

Findings reveal that consumer segmentation is still relevant. Notwithstanding, an adaptation of classification models is necessary according to occurring changes. External models, segmenting consumers by means of lifestyle or fashion typologies, are used. However, it is striking that most companies of the empirical study already apply internal segmentation models with tendency to rise. Moreover, research has shown that consumer classification models in the USA make use of different criteria than in Europe.

Language barriers within the literature review and a low sample size in the empirical study give research limitations. Future management implications can be directed to the identification of procedures for the efficient application of internal segmentation models.

Outline

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List of abbreviations

Acorn	A classification of residential neighborhoods
b4p	best for planning
GfK	Gesellschaft für Konsumforschung
GfK MRI	Gesellschaft für Konsumforschung Mediamark Research & Intelligence
h + p	hachmeister + partner
PRIZM	Potential Rating Index for ZIP Markets
RCS	Roper Consumer Styles
SBI	Strategic Business Insights
UK	United Kingdom
USA	United States of America
USP	Unique Selling Proposition
VALS	Values and Lifestyles

1 Introduction to consumer segmentation models

1.1 Problem and objective

A permanent changing retail environment with a hybrid purchase behavior, as well as rapid developments in technology evoke new challenges for companies. This requires a main focus on the consumer. In this context, market segmentation enables enterprises to address consumer segments individually. Market segmentation stands for the conscious division of a heterogeneous total market into homogeneous sub-markets.

In the textile and apparel industry, geographic, socio-demographic, psychographic and behavioral information are used in order to determine buying preferences and habits of each market segment. Companies can either apply internal or external consumer segmentation models.

However, the classical target group research has difficulties to handle changing circumstances in technology, consumer behavior and market structure.

The rapid developments of **technology** and the resulting progressive mobilization, which may be attributed to the increasing use of smartphones and tablets, enable the consumer to shop anywhere at anytime. The increasing transparency of services and prices forces retailers to develop different value propositions and to concentrate on the customer.

Consumers show a complex and sometimes contradictory purchase behavior. There are changes from a constant behavior to a hybrid and then to a multi-optional one. At the same time, more data are at the retailers' disposal. Hence, the information about their segmented consumers can be optimized.

With regards to the **market structure**, it is expected that multi-channel and online retail will increase to the expenses of pure offline players. Due to the variety of different touch-points, the consumer has with the retailer, an attribution to existing consumer classifications proves to be difficult.

Due to these changes, it is time to conduct a detailed investigation of the consumer segmentation models in order to assess its relevance. The focus of this project is set on west-oriented cultures. The European and American markets are key elements of this evaluation. Consequently, this paper addresses the specific research question:

In how far is the relevance of consumer segmentation models due to changes in consumer behavior, technology and market structure still given?

In support of the research question, the following three statements will be examined:

#1 Consumer segmentation models are nowadays less relevant.

#2 Consumer segmentation models in Europe have a different focus than in the USA.

#3 In the future, company's internal consumer segmentation models will increase in importance.

The statements serve as a guideline for the upcoming research proceeding. They will be evaluated and verified both in the literature review and the empirical part of this research paper.

1.2 Proceeding

The following Figure 1 epitomizes the paper's structure with its main aspects.

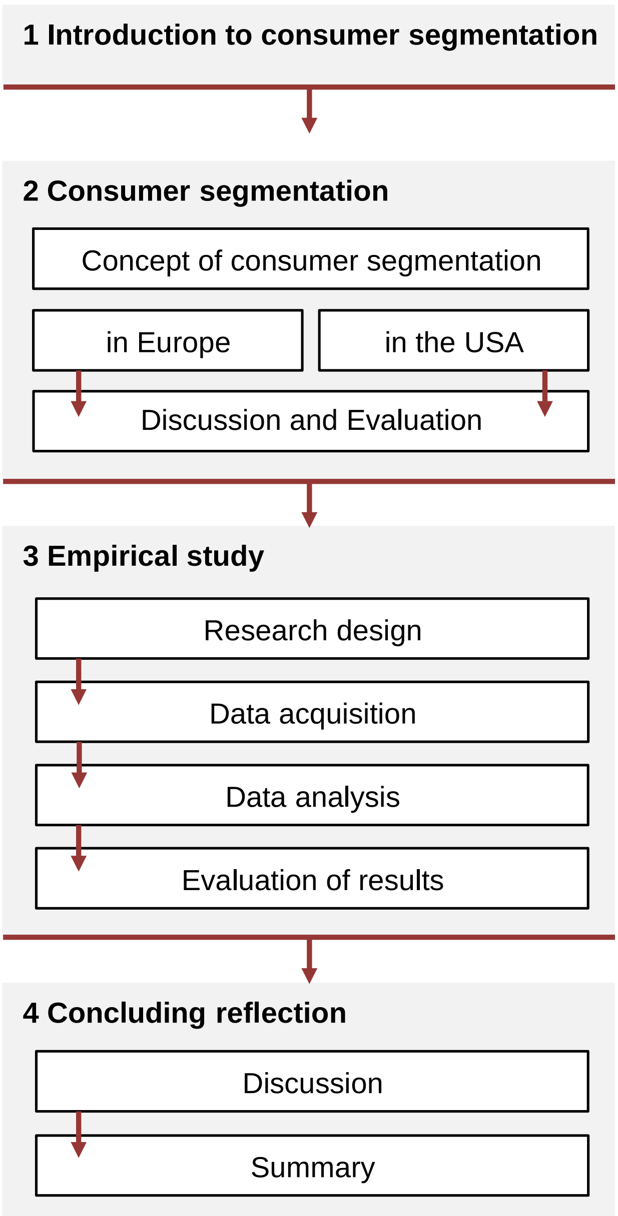

Figure 1: Paper structure

1.3 Research method

The decision was taken to use a qualitative method in form of a literature review and a survey for empirical evidence for a juxtaposition of critical academic theory with experiences of companies' daily business in reality. A systematic and method-based approach with a flexible view will moreover ensure to either prove or refute various literature findings and empirical study outcomes in order to analyze results and to draw a conclusion.

The literature review of this retail management project is based on the results of perusing different sources, ranging from books to online databases, to find appropriate academic material. Additionally, reference lists of eligible scientific research papers served as basis for studies in greater depth. A preliminary literature review in general resulted in the establishment of the paper outline, followed by a specified research for the individual chapters. The use of search key words helped to define the scope of the research question while reviewing the current breadth of professional and academic research literature.

In total, 87 sources have been cited. The below named deployment of actuality for used literature underlines the relevance of the topic consumer segmentation and hence accentuates the need for scientific research. Most of the literature originates from year 2014 and 2015 (compare Figure 2).

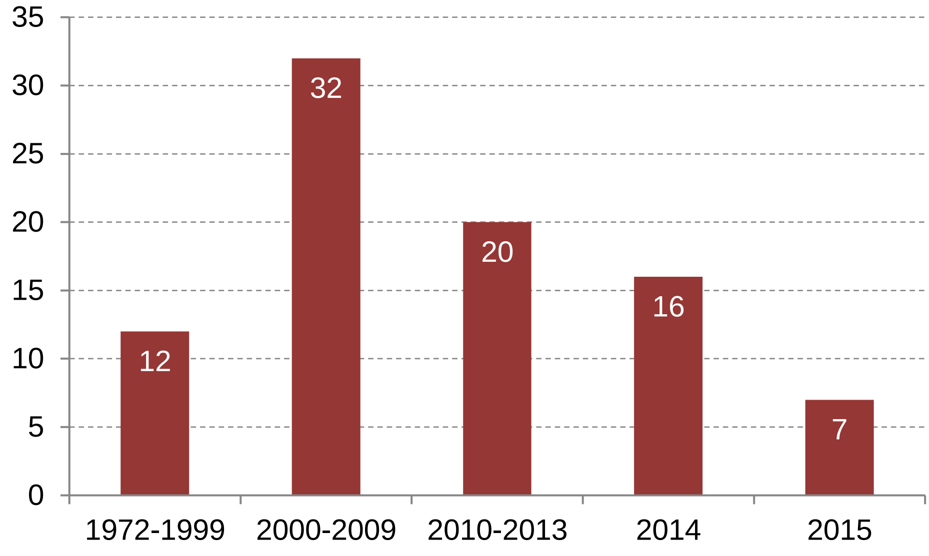

Figure 2: Chronology of literature

The further course of action represents the empirical analysis in the form of a survey concerning the relevance of consumer segmentation models in fashion companies operating in the German market. Both the literature review and the empirical evidence frame the basis of a critical reflection, discussion and evaluation of the results.

2 Consumer segmentation

2.1 Term definition of consumer segmentation

Every segmentation model of consumers can be traced back to market segmentation, one of the most discussed concepts of marketing. Since the 1950's, various concepts and approaches have been developed and hence generated a multiplicity of definitions. These definitions can be classified in a narrow and a broader sense (Daniel, 2014, p. 7). In the narrow sense, market segmentation can be defined as fragmentation of a heterogeneous total market into homogeneous sub-markets. In this context, market segmentation is seen as a market research tool that has as main task to identify market segments (Bauer, 1977, p. 5; Homburg & Krohmer, 2009, p. 463). The broader sense of this definition additionally contains the handling of the sub-markets with special marketing programs (Böhler, 1977, pp. 11–12; Freter, 1983, pp. 19–20).

Table 1 serves as an overview of selected market segmentation definitions.

Source	Description
Smith (1956, p. 4)	„In some cases, however, the marketer may determine that it is better to accept divergent demand as a market characteristic and to adjust product lines and marketing strategy accordingly.“
Sheth (1972, p. 1)	„The strategy of market segmentation refers to the conscious development and pursuit of separate marketing mix programs for essentially the same product or service but for different segments of the customers in the market place.“
Böhler (1977, p. 12)	„Marktsegmentierung ist eine Marketing-Strategie, bei der eine Einteilung von potentiellen bzw. tatsächlichen Abnehmern einer Güterart in Marktsegmente erfolgt, um durch konzentriertes oder differenziertes Marketing zu einem höheren Zielerreichungsgrad als bei undifferenziertem Marketing zu gelangen.“
Freter (1983, p. 13)	“Marktsegmentierung, worunter eine Marketingstrategie zu verstehen ist, die aufgrund einer Aufteilung des heterogenen Gesamtmarktes in homogene Teilmärkte anhand geeigneter Segmentierungskriterien eine segmentspezifische Marktbearbeitung durchführt.”
Homburg & Krohmer (2009, p. 463)	„Marktsegmentierung ist die Aufteilung eines heterogenen Gesamtmarktes in homogene Teilmärkte (Segmente) mittels bestimmter Merkmale der tatsächlichen bzw. potentiellen Käufer (Zielgruppen).“

Table 1: Definitions of market segments

Deducted from the above named literature findings, the paper will work with a market segmentation definition in the broader sense:

Market segmentation is the sub-division of a market into internally homogeneous and among one another heterogeneous groups as well as the handling of one or multiple of those market segments (Bauer, 1977, pp. 9 ff.; Freter, 1983, p. 18; Homburg, 2012, p. 471; Meffert et al., 2015, p. 174).

The main aim of market segmentation is to achieve a high identity degree between offered market performance and desired needs of the target group (Meffert et al., 2015, p.174).

Consequently, a segmentation process is needed. Whereas German authors sub-divide the segmentation process into two phases, Anglo-American authors concentrate on three phases (Daniel, 2014, p.19). Figure 3 provides an overview of different approaches.

	Market Acquisition (Information side/segment building)	**Market Handling** (Action side/target marketing)
Freter (1983/2008)	1. Definition of segment criteria 2. Data collection 3. Segment building	4. Selection of segments 5. Segment specific marketing-mix
Reutterer (2003)	1. Segmentation first rank 2. Segmentation second rank 3. Identification and description of segments 4. Evaluation of segment's attractiveness	5. Selection of segments 6. Segment specific positioning 7. Segment specific marketing mix 8. Segment specific controlling

	Segmenting	**Targeting**	**Positioning**
Lilien/ Rangaswaby (2004)	1. Definition of segment criteria and segment building 2. Discription of segments	3. Evaluation of attractiveness of individual segments 4. Selection of segments 5. Finding of consumers and perspectives in segments	6. Development of a positioning concept
Kotler et al.(2007) Schweiger/ Schrattenecker (2009)	1. Definition of segment criteria and segment building 2. Discription of segments	3. Definition of segment criteria and segment building 4. Discription of segments	5. Development of a positioning concept 6. Implementation of the positioning concept

Figure 3: Overview of different approaches of market segmentation (Freter, 1983, 2008; Kotler et al., 2007; Lilien & Rangaswamy, 2004; Reutterer, 2003; Schweiger & Schrattenecker, 2009)

Although German and Anglo-American concepts show different characteristics in terms of their phases, steps one, three, four and five of Freter's model can be rediscovered in all presented concepts. As a consequence, a process of market segmentation can be derived. In addition to those four steps, the segment controlling from Reutterer's model is added. This aims to quickly identify gaps between strategy goals and strategy execution and to take action when needed (see Figure 4).

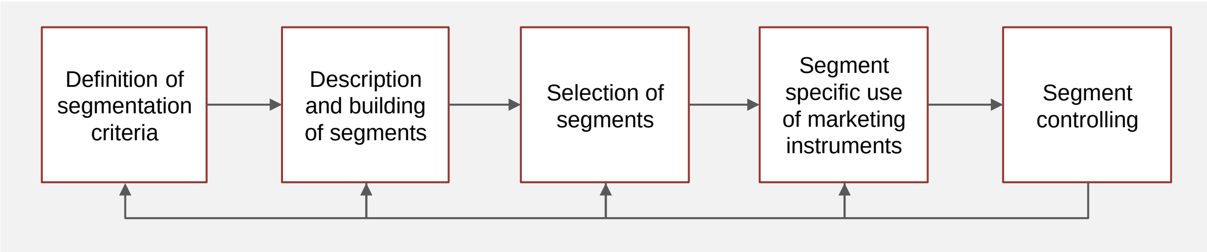

Figure 4: Process of market segmentation (Daniel, 2014, p.19)

2.2 Criteria of consumer segmentation

The wide range of segmentation criteria can be summarized to different criteria groups (Baier & Brusch, 2008; Becker, 2012; Berekoven, Eckert, & Ellenrieder, 1991; Bruhn, 2010; Freter, 1983, 2008; Kesting & Rennhak, 2008; Kotler et al., 2007; Meffert et al., 2015).

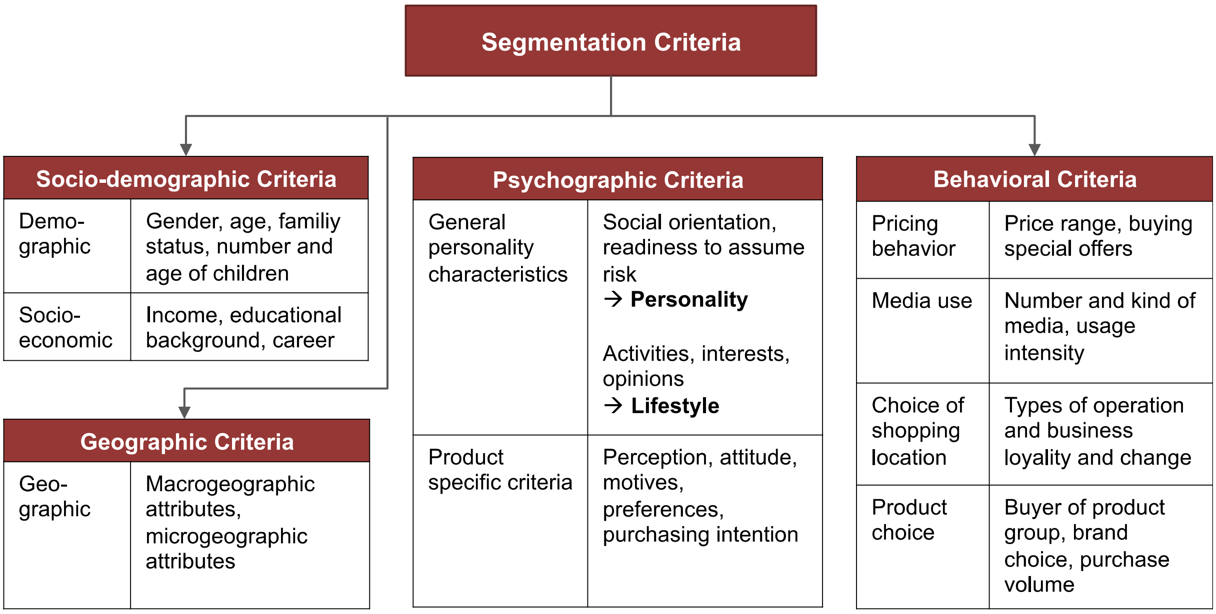

Figure 5: Overview of segmentation criteria (Baier & Brusch, 2008; Becker, 2012; Berekoven et al., 1991; Bruhn, 2010; Freter, 1983, 2008; Kesting & Rennhak, 2008; Kotler et al., 2007; Meffert et al., 2015)

For the purpose of systematization, the difference between geographic, socio-demographic, psychographic and behavioral criteria of market segmentation is made. These groups of criteria are mutually dependent and are commonly used in combination. Figure 5 outlines different segmentation criteria and their characteristics.

Geographic criteria are often used for a first segmentation of the consumer market. The criteria can be sub-divided into macro- and micro-geographic ones. With the help of macro-geographic segmentation, international markets are mainly sub-divided into states, whereas the segmentation in national contexts is based on federal states, cities, rural districts or municipalities (Daniel, 2014, p. 23; Homburg, 2012, p. 473; Meffert et al., 2015, p. 185).

The **socio-demographic** market segmentation is considered as “classical market segmentation” (Vossebein, 2000, p. 25). Socio-demographic segmentation criteria can be divided into demographic and socio-economic features. The **demographic criteria** include gender, age and household size as well as number of children. These criteria are often applied in combination (Homburg, 2012, p. 473). The second group of socio-demographic segmentation criteria consists of **socio-economic** attributes, e.g. apprenticeship, job and income.

Due to a comparatively high buying behavior relevance, the **psychographic criteria**, also referred to as “modern market segmentation”, are of essential importance (Meffert et al., 2015, p. 187). Within the psychographic market segmentation, non-observable constructs are taken into consideration. This kind of criterion leads to the result that purchase groups can be defined by consistent, psychologically related groups (Becker, 2012, pp. 255 ff.; Böhler, 1977, pp. 83 ff.; Daniel, 2014, pp. 23–24; Freter, 2008, pp. 135 ff.; Kesting & Rennhak, 2008, p. 10). General *personality features* and *product-specific attributes* can be differentiated. Personality features can be sub-divided into *lifestyle criteria* and *personality criteria*. Product-specific criteria are stronger related to the consumer’s buying behavior than general personality attributes (Sampson, 1992).

The criteria of **behavior** can be consulted as a further group in the segmentation (Böhler, 1977, pp. 115 ff. ; Frank et al., 1972, pp. 66 ff.; Freter, 1983, pp. 87 ff. ; Philip Kotler & Schellhase, 2011, pp. 471 ff.). Whereas socio-demographic and psychographic criteria are based on determining factors for purchase behavior, behavioral criteria are related to results of buying decision processes. These behavioral criteria can be sub-divided into the four basic principles of marketing: product, price, place and promotion (Freter, 1983, p. 87).

As a summary, the advantages of the socio-demographic and geographic criteria are based on the opportunity to target specific markets. In contrast, psychographic and behavioral criteria can provide information about the concrete design of the marketing instruments due to a close contact to the consumer buying behavior (Meffert et al., 2015, p. 199).

2.3 Consumer segmentation with Big Data

Indeed, limitations of market segmentation are primarily based in the ascertainability respectively accessibility of market segments and secondly in the lack of total explicability and forecast of human behavior (Vavrik, 1991). Riekhof stated in his paper that sharper target groups, ever finer market segmentations and thus ever smaller market segments arise (Riekhof, 2004, p. 10).

These smaller market segments entail that with an increasing differentiation of consumer demand, requirements of market segmentation and used segmentation criteria increase as well. Progressively, it gets difficult to assign the hybrid consumer to a distinct segment (Benkenstein, 2001, p. 70; Riekhof, 2004, p. 10).

It is rather masses of individualization instead of mass communication that already prevails and will continue to matter in the future (Jiang, 2000, p. 215). Back then, classical consumer segmentation was on the one hand required because a more selective classification was technically impossible or solely possible with prohibitive high costs. On the other hand, an individual consumer addressing was not feasible in times of analog media, neither on a technical level nor a cost level. This has changed in the digital era especially for mobile Internet users. Every click, dwell time on websites and searching words are individually traceable and can be clustered to distinctive profiles. On the contrary, the era of social-media deals with dialogic communication on individual customer basis with consideration of their surroundings. The focus is set on individualization, not on mass communication. Besides, a still low standard of knowledge exists and companies’ structures need to be adapted to networked dialog ability (Skibicki & Mühlenbeck, 2014, p.175).

The element that has grabbed center stage attention in this context is Big Data and the question of how to implement it in order to enhance consumer segmentation. It does not only help enterprises to enrich their individual consumer addressing but also enables a new perception on the market landscape (Bishop, 2013).

In conclusion, new strategies in consumer segmentation are needed and they are on their way to be implemented. Still, it is not the data itself that fundamentally changes the possibility and application consumer segmentation offers, but it rather enriches it and procures new perspectives with the potential to illuminate sharper consumer behaviors. It is striking that innumerable research articles deal with Big Data perceiving that it deploys a future challenge. But when it comes to the identification of recommended management actions, research is not sufficient enough yet. Consequently, windows for future research lie in the field of investigations for potential methods of resolution because in the end, it is not a problem of data, but what you do with it (Million, 2013).

2.4 Consumer segmentation models

Consumer segmentation models have attracted researchers' attention for decades now. Although a multiplicity of models has been disposed, re-worked, improved and adapted, permanent changes in technology, market structure and consumer behavior provide for a still unexplored field, especially outside the German market.

Having combed through different sources to find eligible and especially academic material, both national and international valid models could be identified. The German, UK and American market proved to be the most yielding ones, doubtlessly not least because it was written in German or English.

In the following, consumer segmentation models are presented shortly. Key facts, e.g. sample size or segmentation criteria are illustrated in Table 2.

Typology	Country	Editor	Date of Origin	Actuality	Segmentation Criteria	Area of Research	Survey Method/ Basis	Number of Segments
Outfit-Studie	GER	SPIEGEL	1986	updated 4-5 years, last update: 2013	psycho-demographic	Fashion & Watches	online-survey	6 women types 5 men types
best for planning	GER	GIK	2014 (1974)	annualy updates	psycho-demographic	Media, Market & Human	personal interview & written questionnaire	fashion typology: 7 women types 6 men types
HML - Stilgruppenanalyse	GER	HML Modemarketing	1979	quarterly updates	psycho-demographic	Fashion	in-home interviews	10 types
Sinus Milieus	INT	Sinus Sociovision	1979	continous updates	psycho-demographic	Lifestyle	different data sources (lifestyle surveys, etc.)	10 types
GfK Bekleidungsstile	GER	GfK	1982 women 198 men	continous updates	psycho-demographic	Fashion & Shoes	GfK Textile Panel & GfK Consumer Panel	9 women types 6 men types
Roper Consumer Styles	INT	GfK	1989	annualy updates	psycho-demographic	Lifestyle	GfK Consumer Panel and individual different data sources	8 types
Acorn	UK	CACI	~ 1970	annualy updates	geo-demographic	Lifestyle	different data sources (census, lifestyle surveys, etc.)	6 categories 18 groups 62 types
Fashion Segments	UK	Experian	2002	last update: ~2009	psycho-demographic	Fashion	Kantar worldpanel	20 women types 15 men types
Mosaic	INT	Experian	~ 1980	last update: 2014	geo-demographic	Lifestyle	different data sources (census, lifestyle surveys, etc.)	15 groups (UK) 66 types (UK) 10 global types
VALS	USA	SRIC-BI	1978	no information	psycho-demographic	Lifestyle	survey questionnaires	8 types
PRIZM	USA	Nielsen	1974	annualy updates	geo-demographic	Lifestyle	different data sources (Census, lifestylesurveys, etc.)	14 social groups 11 lifestage groups 66 types
Survey of the American Consumer	USA	GfK MRI	2003	semi annualy updates	psycho-demographic	Lifestyle	in-home interviews	with regard to fashion: 4 types

Table 2: Comparison of consumer segmentation models

2.4.1 Relevant consumer segmentation models in Europe

The **Outfit Studie by SPIEGEL** is a German model, which distinguishes and describes different types with correlating attitudes, motives and preferences in terms of apparel and fashion (Schnaars, 2015).

German literature holds a multiplicity of references to the SPIEGEL Outfit Studie. Especially when it comes to the explanation or measurement and evaluation of consumer behavior or individual brands in matters of fashion, scientific literature authors such as Albaum (1991), Kleinhückelkotten (2002), Ruhland (2003, pp. 42–44), Sälzer (2004), Wessel (2004, pp. 21 ff.) and Freter & Baumgarth (2005, p. 458) refer to the SPIEGEL Outfit Studie.

Since 1979, **Sinus Sociovision** regularly segments the German population into combined value- and social class-groups, the **Sinus-Milieus**. Purpose of this approach is an adequate collection of the living environment of target groups under consideration of changing attitudes and value orientations. Nowadays, the Sinus-Milieus are available for 18 countries (Pepels, 2013, p. 61; Sinus Institut, 2015).

The status quo in literature shows that it is one of the most attention given segmentation models. In general, eminently respectable marketing experts name this model in their publications, e.g. Kotler (Kotler & Schellhase, 2011). In addition, Sinus-Milieus are connected with fashion typologies such as **HML-Stilgruppenanalyse** (Müller, 2011). One of the basis for the Sinus-Milieus is the **best for planning** survey (b4p best for planning, 2014).

GfK-Bekleidungsstile by Gesellschaft für Konsumforschung (GfK) is a segmentation model dedicated to the German fashion sector. It has been generated in order to answer the question “Who wears what?”. Each Bekleidungsstil describes formalities, e.g. how a distinct type likes to appear and how he/she likes to dress (Albaum, 1991, p. 255; Mücke, 2014).

Several books paid attention to the **GfK-Bekleidungsstile**, e.g. Albaum (1991, pp. 255–256), Brüns (1999, pp. 467–488) and Kölzer & Ziehe (2014, pp. 287–288). Additionally, articles in professional fashion journals such as Textilwirtschaft, e.g. Albaum (2001) or Probe (2012), can be found.

Data basis for the GfK-Bekleidungsstile is the GfK Textilpanel and the consumer data of the **Roper Consumer Styles (RCS)**. These analyze consumers’ values and their influence on the spending behavior from a both quantitative and qualitative view in more than 40 countries on five continents (Peichl, 2014, p. 136).

An example for a geo-demographic segmentation is **CACI's model Acorn**. It analyzes the UK population by postcodes, neighbourhoods and households (ACORN, 2013).

An additional geo-demographic segmentation on an international level is **Mosaic by Experian**. By now, the model exists in 29 countries all over the world (Experian, 2014).

Frequently, the scientific literature refers to Mosaic. Recent articles dealt with the model in the Netherlands (Wijnen, Kemperman, & Janssen, 2011), Belgium (Verhetsel, 2005), Romania (Precision Marketing, 2006), France (Precision Marketing, 2005) and Finland (Takala, 2014). Especially fashion literature originates from Jackson & Shaw (2008, p. 59), Easey (2009, pp. 91–92) and McKelvey & Munslow (2009, p. 8).

Another model of Experian is **Fashion Segments**, specialized to the fashion purchasing behavior of the UK population (The Retail Bulletin, 2002).

2.4.2 Relevant consumer segmentation models in the USA

The **Values and Lifestyles (VALS)** concept, developed **by SBI**, has been established to improve the predictability of consumer behavior and its drivers (Lynch & Strauss, 2007, p. 24).

VALS is one of the most discussed, cited and referred to lifestyle segmentation model in literature (Beatty, Homer, & Kahle, 1988; Marshall, 2004; Quelch, 1989, p. 36; Solomon, 2009, pp. 300–302). Concerning the fashion literature, „VALS is used for more than an understanding of fashion and influences on apparel-purchasing behavior“ (Lynch & Strauss, 2007, p. 27). Besides, VALS is named in the following fashion related publications: Lynch & Strauss (2007, pp. 24–27), Jackson & Shaw (2008, pp. 65–67), Valentine & Powers (2013) and Quinn et al. (2007).

PRIZM by Nielsen describes consumer preferences by a combination of demographic, behavioral and geographic data in order to classify every American household into one of 66 segments (The Nielsen Company, 2015).

Generally, it can be stated that PRIZM is an often referred to model and one of the most known geographic segmentation models (Grove, Locke, & O'Neil-Dunne, 2014; Lynn, 2011; A. D. Singleton & Spielman, 2014; Michel Wedel & Kamakura, 2003, pp. 244 ff.). Directing the focus on fashion, literature findings are rare. Merely, Rath et al. (2014, pp. 227–228) name an example of how a retailer uses PRIZM. The application is comparable to the one of Experian's Mosaic.

GfK MRI (Mediamark Research & Intelligence) established the **Survey of the American Consumer**. Collected data inform about demographics, lifestyle and attitudes as well as product, brand and media usage (Ferrell & Hartline, 2012, p. 80). The segmentation is not specialized to fashion. However, it contains a fashion & style segmentation (GfK MRI, 2015).

In literature, GfK MRI is often referred to in the context of media researches (Huang & Wang, 2011; Page, 2011; Pittsley, 2014).

2.5 Discussion & evaluation of consumer segmentation models

The research was based on the identification of relevant consumer segmentation models in Europe and the USA.

As expected, it is an extensive and substantial theme with high relevance. Particularly remarkable is the fact that current segmentation models dedicated to the fashion sector transcending German borders were rare to find. Reasons for this can either be due to language barriers that impeded a deeper and detailed research in the corresponding national language or the fact that fashion specific segmentation models simply do not exist.

A striking finding, which proved to be generalizable, is the fact that geo-demographic segmentation is mostly based on census data and added by additional data sources. In contrast, psycho-demographic classifications are based on data panels. These can either be continuous panels, e.g. the GfK Textilpanel or one-time surveys of individual sample groups, e.g. SPIEGEL Outfit Studie and b4p.

Comparison of the models' date of origin reveals that most of them arose in the 1970's and 1980's. Consequently, deep know-how due to a long establishment by now can be assumed.

It is fact that geo-demographic segmentation identifies with 62-66 types more than a psycho-demographic approach does, which normally identifies not more than ten types. Beyond, psycho-demographic segmentation (lifestyle) is more significant for the fashion industry than geo-demographic information. As Albaum stated in his research, lifestyle and resulting fashion implications are intimately connected with each other (Albaum, 1991, p. 258).

Doubtlessly, fashion segmentation models are more specialized and hence useful for fashion companies. However, research has shown that lifestyle segmentation models and their providers offer specialized solutions for each industry, which enables an adaptation to the fashion market and a company specific implementation, e.g. Acorn as substitute for Fashion Segments.

After having compared the different segmentation approaches to the best of the available knowledge, it comes to the identification of research gaps and future research windows. In general, it can be recorded that national fashion segmentation systems exist and international general systems (e.g. Mosaic) - but no combination of both.

Surprisingly, multiple countries with fashion metropolis, e.g. France (Paris), Italy (Milan), Spain (Madrid) or Denmark (Copenhagen), do not possess any segmentation models and a fortiori not linked to the fashion sector. It might be interesting to cope with the reasons for this phenomenon. It floats the unanswered question whether fashion segmentation models are not needed or rather if they are not used to its full potential?

3 Empirical study

3.1 Research design

A permanent changing retail environment and a hybrid purchase behavior of the consumer as well as rapid developments in technology evoke new challenges for companies. Due to a higher amount of available data, the company can target its customers even more specific. Because of these reasons, an investigation of the relevance of consumer segmentation models shall be conducted in this empirical study.

Aim of this study is to evaluate the fashion industry with regards to the application of consumer segmentation models in practice in order to receive a representative result for trendsetting decisions. The following flowchart (Figure 6) illustrates the proceedings that have been taken:

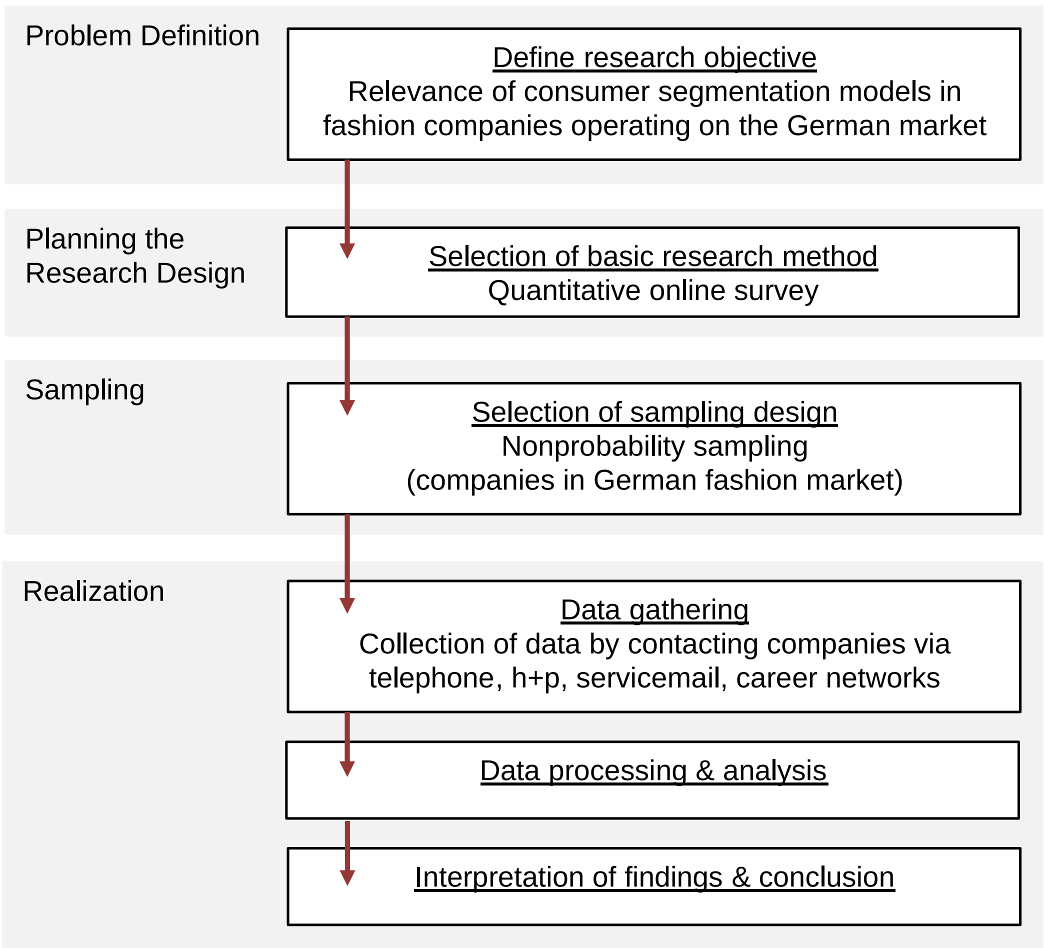

Figure 6: Flowchart of the research process

3.1.1 Research method

The empirical study is based on descriptive research since it aims to mirror the usage of and opinion about consumer segmentation models in companies. Because of the fact that primary data in the form of research articles and a multiplicity of literature in books already exist, it is time to "'paint a picture' of a given situation" (Zikmund & Babin, 2013, p. 49). Descriptive research "describes characteristics of objects, people, groups, organizations, or environments […] [and] often helps [to] describe market segments" (Zikmund & Babin, 2013, p. 49). Data acquisition is carried out by the help of a standardized online questionnaire within the framework of a cross-sectional study. Simultaneously, a survey of the total sample size is conducted in a relatively short period of time as a quantitative research on the German market (Raithel, 2008, p. 50). Previously, probands are identified and purposefully contacted instead of acquiring them via a freely accessible Internet link. Thereby, the data acquisition relating to the response behavior and the socio-demographic composition does not significantly differ from a written questionnaire. Moreover, the main disadvantages of online-surveys, possible bias due to self-selection of probands and the risk of untrustworthy responses, are reduced due to the anonymity of the Internet (Homburg & Krohmer, 2009, p. 260). By reason of using a standardized questionnaire, procedure objectivity of the survey is warranted (Andrée, 2013, pp. 113–114).

3.1.2 Interview layout

The interview layout comprises the structure and graphical design of the survey instrument as well as the format and wording of the comprising questions (Homburg & Krohmer, 2009, p. 296). The questionnaire design is intended to minimize the cognitive efforts for probands to avoid biases of the results due to decreasing motivation. This fact is the reason why the time needed to answer with 5-10 minutes has been kept short. The corresponding language is German although the research paper is written in English. In addition, short and precise wording is used without special vocabulary for a better understanding (Laatz, 1993, p. 124). For a pretest, ten individuals have been asked in a period of one week in order to examine understanding, time needed to answer the questionnaire and cognitive effort. Comments of the test probands were considered. Additionally, Prof. Dr. Jochen Strähle, professor at Reutlingen University specialized in market research, has been consulted to professionalize the survey.

The finally implemented questionnaire starts with a cover sheet. It entails the aim of the investigation, instructions for answering the questionnaire and the hint that questions can be answered anonymously. Furthermore, probands have the possibility to receive the results at the end of the study. The basic structure intends to gather information about the general application of segmentation models. In a second step, difficulties, market changes and resulting optimization potentials should be revealed. Table 3 symbolizes the survey questions:

Number	Chapter	Question
Q1	3.3.1	Who is your consumer target group?
Q2	3.3.2	Do you use consumer segmentation models?
Q3	3.3.2	What kind of consumer segmentation model do you use?
Q4	3.3.2	Why do you use this kind of segmentation model?
Q5	3.3.2	How do you alternatively segment your customers?
Q6	3.3.3	What are difficulties when segmenting your customers?
Q7	3.3.4	Which general changes in the apparel industry do you expect in the next 5 years?
Q8	3.3.5	According to the changes, what are optimization potentials for consumer segmentation / consumer segmentation models?
Q9	3.3.6	How do you evaluate the following statements?
Q10	3.2.2.	Are we allowed to list your company by name in the study?
Q11	3.2.2.	Company name
Q12	3.2.2	Company size
Q13	3.2.2	Company format
Q14	3.2.2	Do you wish to get the results of the study?

Table 2: Survey questions

3.2 Data acquisition

3.2.1 Execution of data acquisition

The data acquisition took place between 25th of March 2015 and 1st of May 2015. Selected probands fulfill the following criteria: They interact as wholesaler, retailer, multi-channel, vertical or online company in the German fashion market. In total, n=243 companies were contacted via different approaches:

- hachmeister + partner (n=132)

- telephone (n=52)
- service mail (n=35)
- private contacts (n=14)
- career networks (n=10)

The following Figure 7 illustrates the sample size, including the number of participants, companies rejecting to take part in the survey, unfinished questionnaires and the quantity of open requests.

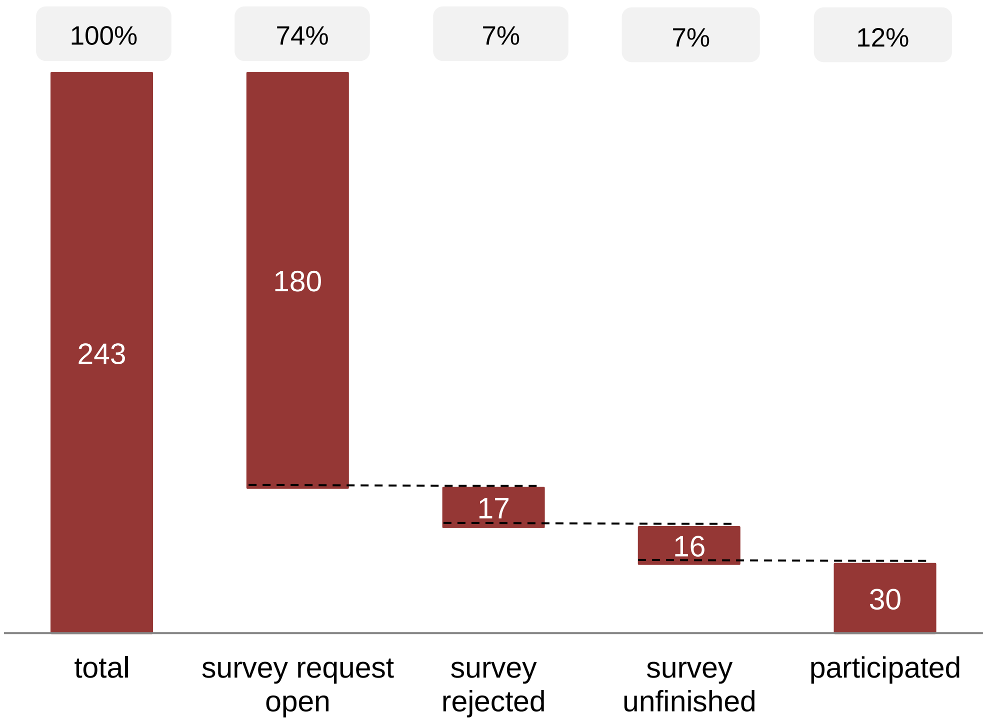

Figure 7: Acquired sample size

The different approaches to win over companies in order to take part in the study were based on various intentions. The contact via hachmeister + partner, a German consultancy specialized in the fashion sector provided a professional basis. The contacting via telephone offered the possibility to directly talk to responsible employees who are specialized in this field. Moreover, questions and details about the study's procedure could be answered and supplementary information could be provided. Mails to a general service address have just been sent if no telephone number was published on the website. Private contacts have been consulted followed by the intention to raise the response rate probability by reason of personal relationships. Career networks were supposed to provide direct contacts to professional employees. All addressed contacts received a one pager with further information about the survey. Figure 8 exemplifies the results of each contact channel.

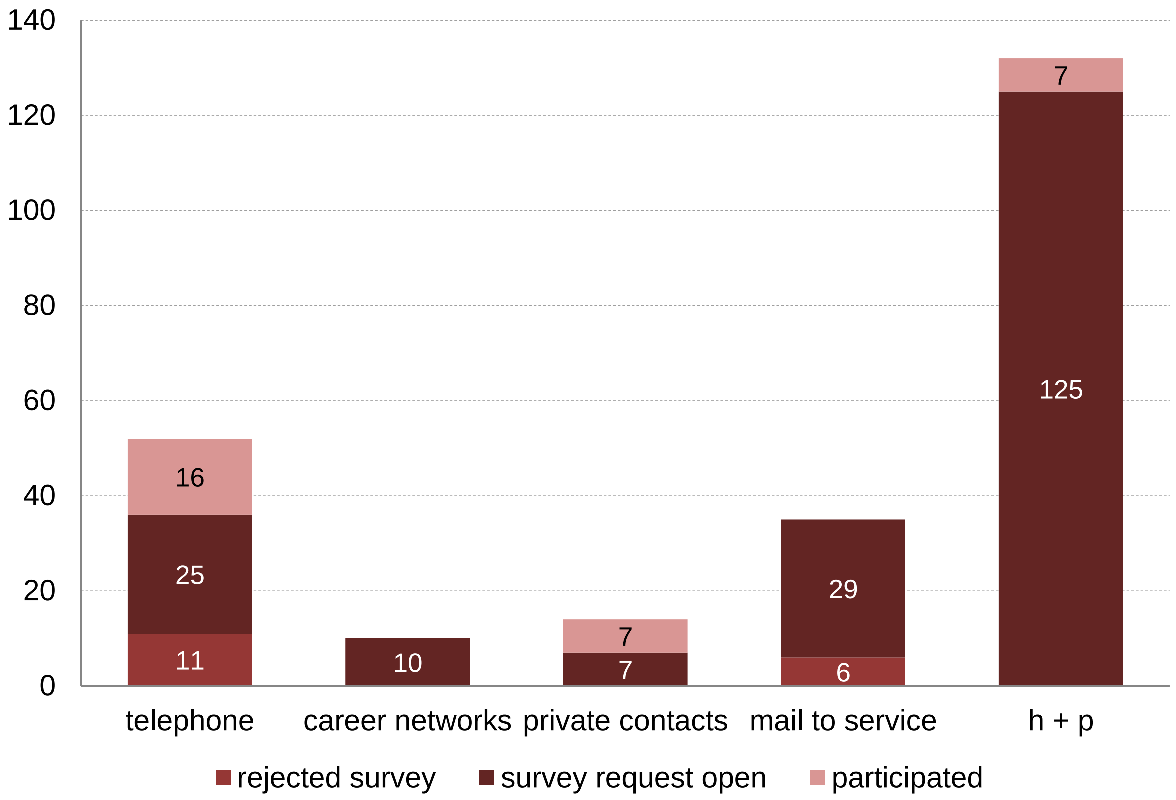

Figure 8: Response rate divided by contact type

Furthermore, reminder e-mails have been sent to 31 companies on the 16th of April 2015 and evoked a positive turn in the number of participants. Seven companies answered the survey in the context of this reminder e-mail.

3.2.2 Composition of sample size

To begin with, 30 individuals participated in the survey in total, six of them agreed to be mentioned by name and 25 are interested to receive the results at the end of the study.

The available characteristics to describe the sample size are determined by the size of the companies and their format. At this point, it needs to be considered that multiple nominations are included in Figure 9. In detail, 16 companies named only one channel, the remaining 14 companies identified themselves with two to five different formats.

As Figure 9 indicates, the wholesale and retail format dominate in this sample size and have the same weighting. For now, the format of verticalization deploys the smallest dimension. In addition, it needs to be considered that companies' definition of company formats differ, hence survey bias cannot be excluded at this point.

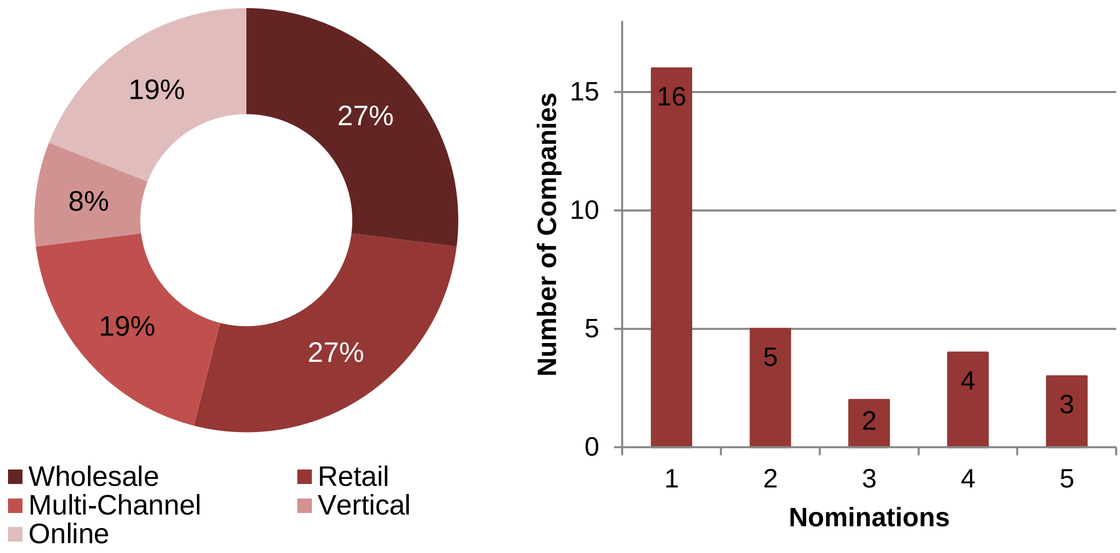

Figure 9: Percentaged distribution of company format

With regards to the company size, it is striking that more than a third of participated companies has more than 1 000 employees. To a certain extent, this fact mirrors the validity and significance of the study's representativeness (compare Figure 10).

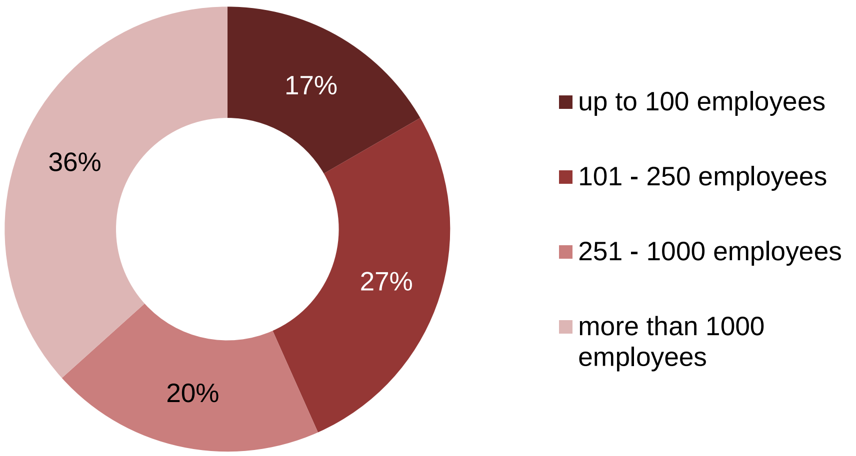

Figure 10: Percentaged distribution of company size

3.2.3 Sources of survey errors

Within a survey, different types of errors can occur. They can be either of systematic or random nature. The following figure exemplifies the different error types.

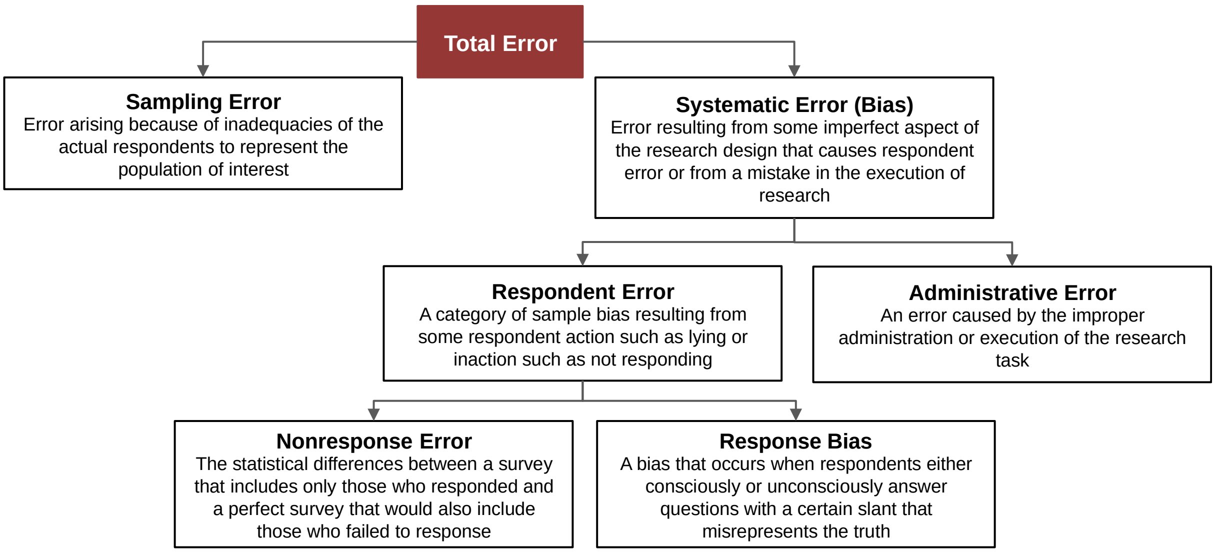

Figure 11: Sources of survey errors (based on Zikmund & Babin, 2013, pp. 154–155)

Errors that occurred in the present empirical study will be classified and assigned to the correspondent scheme on hand (compare Figure 11).

To begin with, *sampling errors* can be identified with regards to the sample size. The determination of the population of interest pursued the primary goal to be a fashion company operating in the German market. In the first instance, company size and format have been neglected. This leads to the error that participated companies cannot represent the German fashion market appropriately.

Turning to the *systematic errors*, both nonresponse errors and response biases could be identified in the sub-category *respondent error*.

In matters of *nonresponse errors,* unqualified answers could be regarded equal to a non-response. Fortunately, this kind of bias occurred just three times.

Concentrating on *response bias*, all 30 participants filled out the survey and finished it. However, since not every question has been marked as mandatory question, some of such have not been answered. This kind of bias can hence partly be seen as a mixture of response bias and nonresponse error. Still, benefits and drawbacks need to be contrasted at this point. Probably even less companies would have taken part in the survey at all if they would have been forced to answer every question and then rather decided to not answer anything at all. The fact that more than 50% of participated companies only mentioned socio-demographic criteria (compare chapter 3.3.1) needs to be questioned as potential bias because companies probably did not want to be identified? Doubtlessly, this aspect mirrors an additional response bias.

What needs to be analyzed in a differentiated manner is the fact that 53,7% of contacted companies have been addressed by hachmeister + partner. At this point a distortion of results or tendency for the h+p Stilgruppen model could be assumed. This bias can be excluded since only one of seven participated companies (contacted by h+p) named this model in their given answers. Another confirmation of this aspect is given by the fact that no totally anonymous answers have been given after h+p sent a circular e-mail.

As a summary of identified errors, it can be recorded that biases in different areas, partly influencable, partly not, occurred. It is important to not consider this empirical study as representative where general recommended actions can be drawn from, but rather as a survey that pictures a little cut-out of the fashion market in practice.

3.3 Data analysis

3.3.1 Target group

When it comes to the analysis of the respondents' consumer target group (compare Table 3, Q1), answers of all 30 participants could be assigned to four different categories. The first category is based on **socio-demographic criteria**. 26,7% stated to either classify their consumer per age and / or gender. Another 26,7% included a third attribute, e.g. income, which indicates that more than 50% use socio-demographic criteria in order to determine their target group.

It is remarkable that **psychographic segmentation** is another favored segmentation, mostly mixed with socio-demographic attributes. The classification counts for 30% of the given replies.

Group three consists of **style segmentation**. For 6,7%, a differentiation between styles is the appropriate segmentation.

The **target group = retailer** category is used by wholesale companies and represents 10% of answers provided. Figure 12 epitomizes the different identified criteria.

As identified in literature, demographic features cannot efficiently enough describe target groups in the fashion industry. Apparently, results in practice do not mirror these findings yet.

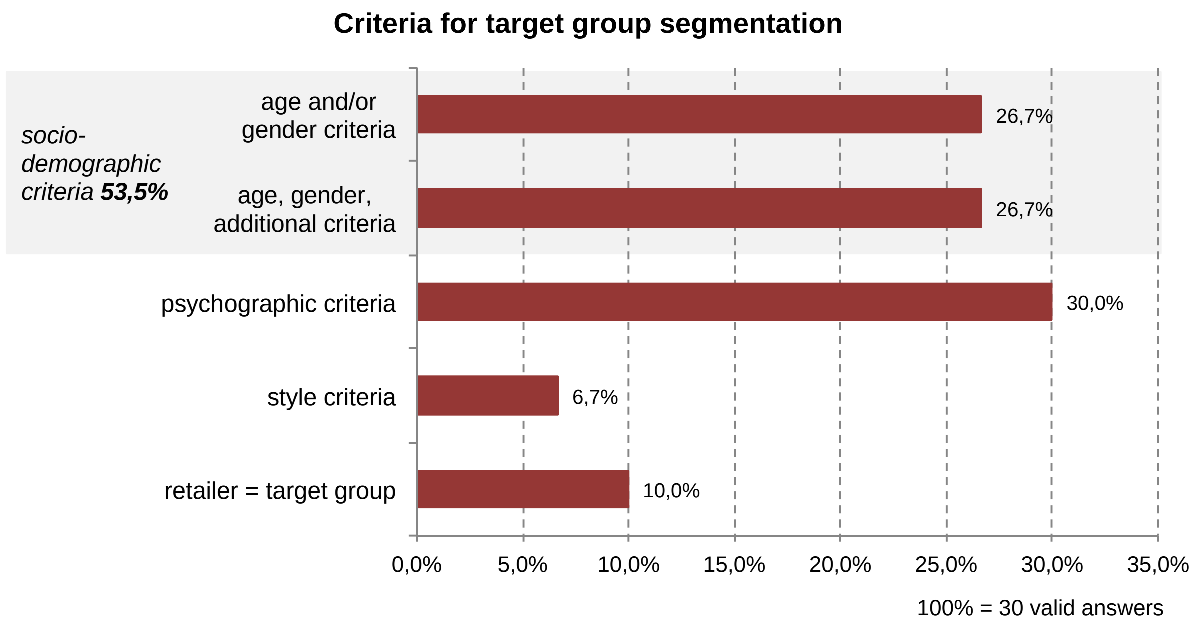

Figure 12: Criteria for target group segmentation

3.3.2 Internal and external consumer segmentation models

The examination of consumer segmentation model application resulted in valuable insights (compare Table 3, Q2-Q5). 29 out of 30 answers can be appraised. Focusing on the assignment of **external models**, nine out of 29 (31%) use them:

- five use solely external ones
- four apply a mixture of external and internal segmentation models

For a valid evaluation, it is also important to mention that more than one external model is used. From these nine companies, six use exactly one external model, the remaining three enterprises named up to four different external models. Figure 13 serves as a summarizing overview.

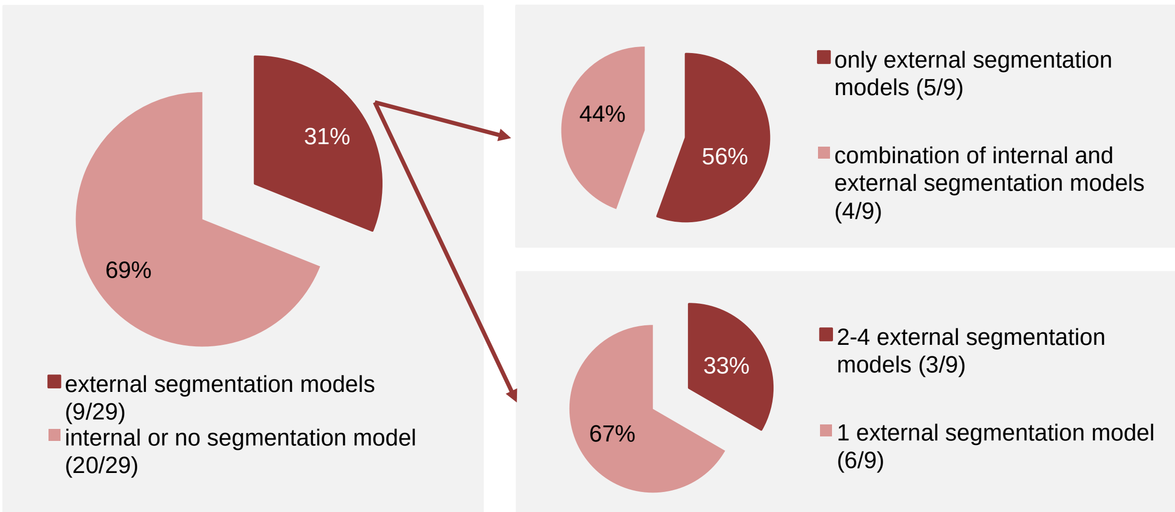

Figure 13: Allocation of internal and external application of segmentation models

Summarized, it reveals that the Sinus-Milieus, GfK and h+p are the most applied external segmentation models. Figure 14 shows the allocation of chosen segmentation models:

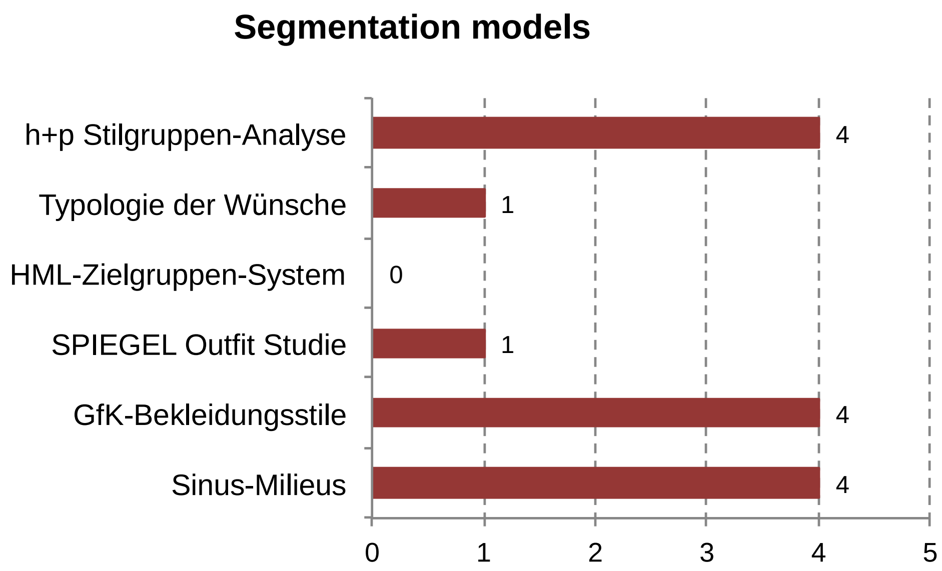

Figure 14: Allocation of chosen segmentation models

Turning to the analysis of results regarding **internal segmentation**, further trends and conclusions can be drawn. Nine companies indicated to utilize internal segmentation. Five of them exclusively use this kind of segmentation. Within this evaluation, it also turned out that 15 companies do not use any segmentation models. Analyzing their answers, it got obvious that these named alternative methods can thoroughly be regarded as kind of segmentation model. Hence, the evaluation and clustering of question four and five are carried out together (compare Table 3, Q4-Q5).

In matters of *how* companies segment their consumers, given answers can be clustered to four distinctive categories: *internal data, wholesale, external factors and certain criteria*.

Five companies specified to segment their customers by *internal data*. Two companies are representatively quoted:

- "We select the purchasing behavior based on internally collected data (type and number of items, frequency, activity, online/offline channel affinity)" (Laake & Höler, 2015, p. 99, translated).
- "Shopping behavior customer file, brand group, purchase frequency, purchase amount, shopping location" (Laake & Höler, 2015, p. 99, translated).

Concentrating on the next category *wholesale*, three companies consider the retail market as their customer.

Four companies have named *external factors, such as competition or market development,* as segmentation approach. One company names as reason the internal evaluation of customer segments and benchmark with competitors (Laake & Höler, 2015, p. 99).

The last segment contains six companies that use a *distinct criterion*. It can be differentiated either by style or for example different categories. Figure 15 serves as an overview.

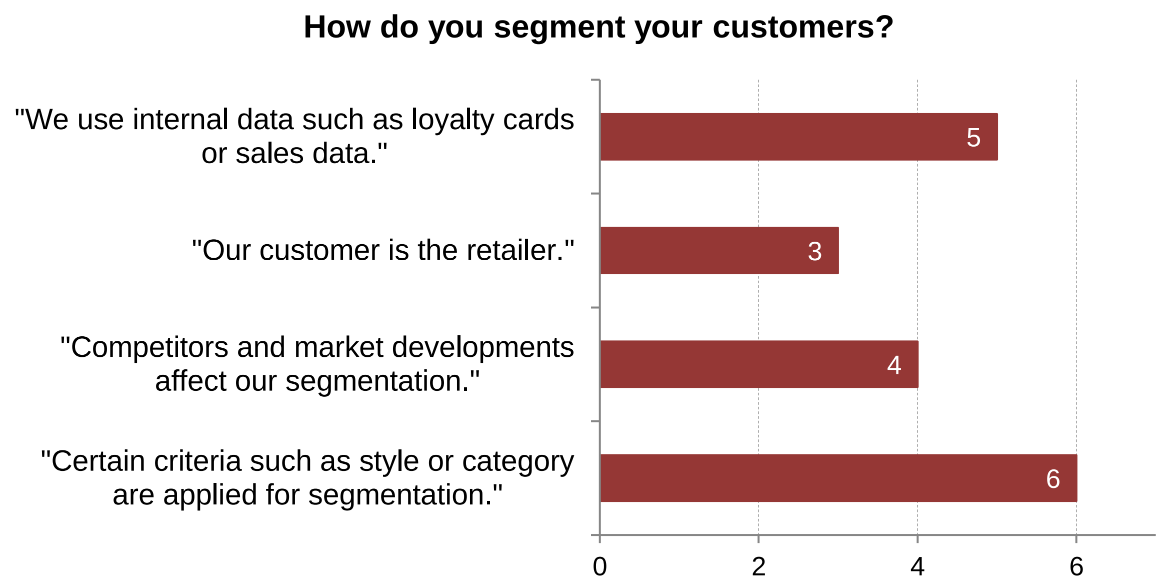

Figure 15: Results on *how* customers are segmented

Concentrating on reasons why internal segmentation models are used, cost reasons, optimal consumer addressing as well as improved operative usability and evaluation- and reaction possibilities are named (Laake & Höler, 2015, p. 100).

3.3.3 Difficulties in consumer segmentation

Regarding difficulties companies face within the segmentation of their customers (compare Table 3, Q6), six participants out of 30 did not answer the question. Analyzing the remaining 24 answers, three main categories could be identified: *consumer behavior, information basis and efficiency*.

Concentrating on *consumer behavior*, respondents' answers can be sub-divided into buying behavior and intersection of target groups. Regarding the buying behavior, the increasing digitalization illustrates a difficulty for companies. "Due to digitalization, consumers have more possibilities to access products. In this context, the target group becomes younger, which additionally complicates a precise segmentation" (Laake & Höler, 2015, p. 101, translated). In addition, three companies (12,5%) name the hybridity in matters of buying behavior as a challenge when it comes to a preferably exact segmentation.

Consumers can belong to more than one group – this problem is faced by multiple enterprises and accounts for 25% of participants' answers.

Turning to the category *information basis*, results show that more precise information is needed, companies do not have a real Customer Relationship Management (CRM) system or admitted, they do not know their customers enough. Simply astonishing was the statement of a vertical company with more than 1 000 employees that indicated that they do not have a data basis but rather segment their customers by personal experience. Consequently, 16,7% of participants state a lack of information as difficulty.

Key result in terms of *efficiency* is that long-term strategies are not applicable due to dynamic changes. The factor time seems to be a variable that influences and apparently neglects a revision of the segmentation system. More effort is needed to segment consumers. According to 8,3%, demographic approaches have lost in importance. A company with more than 1 000 employees questions if demographic values are still relevant and rather concludes that segmentation according to age is no longer meaningful (Laake & Höler, 2015, p. 102). To shed light on another perspective, a retailer that conducts internal segmentation, submitted that internal segments need to be compared with the market view (Laake & Höler, 2015, p. 102).

To summarize the results of difficulties faced with customer segmentation, it can be recorded that of the 24 answers, 11 statements were related to the area of consumer behavior (45,8%), six lay in the area of efficiency (25%), four companies identified a missing data basis as challenge (16,7%) and further statements could not be attributed (compare Figure 16).

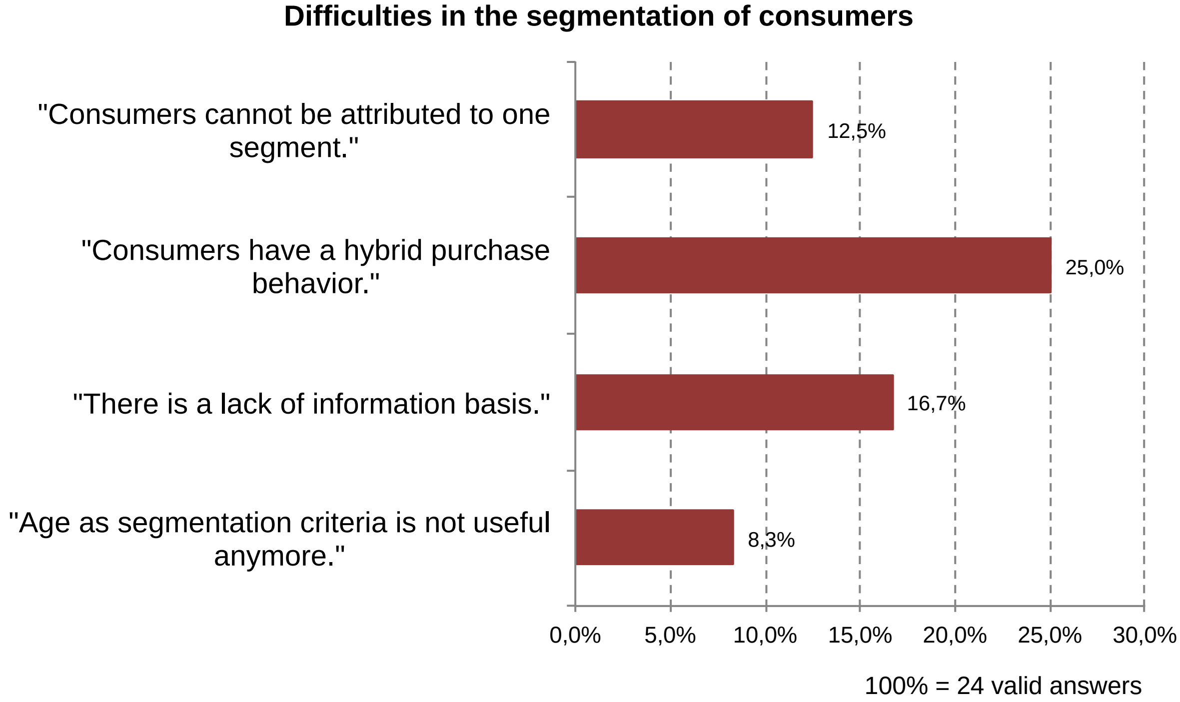

Figure 16: Difficulties in the segmentation of consumers

Striking is the aspect of consumer hybridity. It can be regarded as a real challenge since this behavior makes it nearly impossible to conduct a selective segmentation. It will always stay blurry to a certain extent (Zehrer & Frischhut, 2013). As indicated in the statements, technical preconditions do not exist at all in some companies or need to be updated and adapted in order to use available data efficiently. Although it is a highly topical and discussed subject in literature (compare chapter 2.3), nobody mentioned the “Big Data” phenomenon as tool to improve segmentation. Apparently, companies do not regard the data as potential to target and understand consumers better.

3.3.4 Expected future changes in the fashion industry

Research of the following question (compare Table 3, Q7) was based on discovering future changes. Statements and opinions of usable 27 out of 30 respondents were clustered to the following five main aspects: *channel structure, sourcing, technology, competition and customer satisfaction* (compare Figure 17).

Essentially, in terms of *channel structure*, e-commerce and its steady growth looms large. 37% of the participants named this aspect and emphasized a huge future potential. On the contrary, a retailer and a multi-channel company act on the assumption that stagnation in e-commerce growth will occur.

Another sub-aspect of the channel structure is deployed by changes in the direction of omni-chanelling. At this point, a wholesaler regards it inevitable to link online and offline channels. What is needed are "concepts that link the advantages of retail and online channel" (Laake & Höler, 2015, p. 103, translated). Cross channel services are regarded as future changes and simultaneously potentials. Four companies (14,8%) argue for omni-channelling as a success factor. In this context, the following aspect is of utmost importance: "The end consumer needs to be addressed on all channels" (Laake & Höler, 2015, p. 103, translated).

Regarding the retail landscape, survey participants expect small retailers to vanish from the market. Apart from this, turnover and shopping frequency will decline. This trend is mirrored in a retailer's evidence: "More mono label stores, less multi label stores, less supplier, significantly less, small, owner-managed retail stores" (Laake & Höler, 2015, p. 103, translated). Hence, these answers argue with 18,5% for a decreasing potential in the retail area.

A further issue in matters of channel structure is verticalization. It is named by four companies (14,8%) and supposed to remain important.

A retailer anticipates closer cooperation between retailer and supplier in order to shorten lead times, to optimize processes and to better satisfy customers' needs.

Changes in *sourcing* turned out to be of high importance. On the one hand, new technologies are predicted to play a significant role in the supply chain. On the other hand, sourcing prices are forecasted to rise and sourcing rhythms are supposed to become shorter. Besides, sourcing pertains to country choice and sustainability. Respondents believe in a change of production countries and the industrial location in new countries. This statement is in line with the opinion of two participating companies:

- "Relocation of production from Asia to Europe" (Laake & Höler, 2015, p. 104, translated)
- "Change of production countries due to companies' public perception by the end consumer" (Laake & Höler, 2015, p. 104, translated)

Taking sustainability into consideration within the sourcing aspect, a clear tendency of statements lies in the customers' strive to inform themselves and to be more interested in the apparels' origin than a couple of years before. Company values are expected to become more important and hence Corporate Social Responsibility (CSR). Five companies (18,5%) in this survey concretely named and talked about it.

Turning to *technology*, digitalization is with 18,5% named as important aspect, e.g. social media and augmented reality.

As questionnaire results show, *competition* is identified as another future change with growing hyper competition. In total, seven enterprises, accounting for 25,9%, stated increasing competition and pressure for differentiation as future change factor. Only companies with an unique selling proposition (USP) will remain successful in the market.

The last aspect addresses *customer satisfaction*. At first, a shift in consumer behavior can be observed. It is stated that customers are less willing to compromise if articles are not available and are more demanding. Besides, it can be asserted that less money is spent for apparel. In addition, two companies recognized an increased interest of their older target group in fashion trends.

To satisfy the customer, one company accentuates that CRM will increase. This contains both mailings and services on retail level.

Taking all named aspects into consideration, it is striking that probands mirror opinions in the current specialized press and literature (ECC Köln, 2014; ECC Köln & hybris GmbH, 2014; Heinemann, 2014, p. 19; Krebs & Haak, 2001; Schramm-Klein, Wagner, Neus, Swoboda, & Foscht, 2014, p. 331; Täuber, 2015).

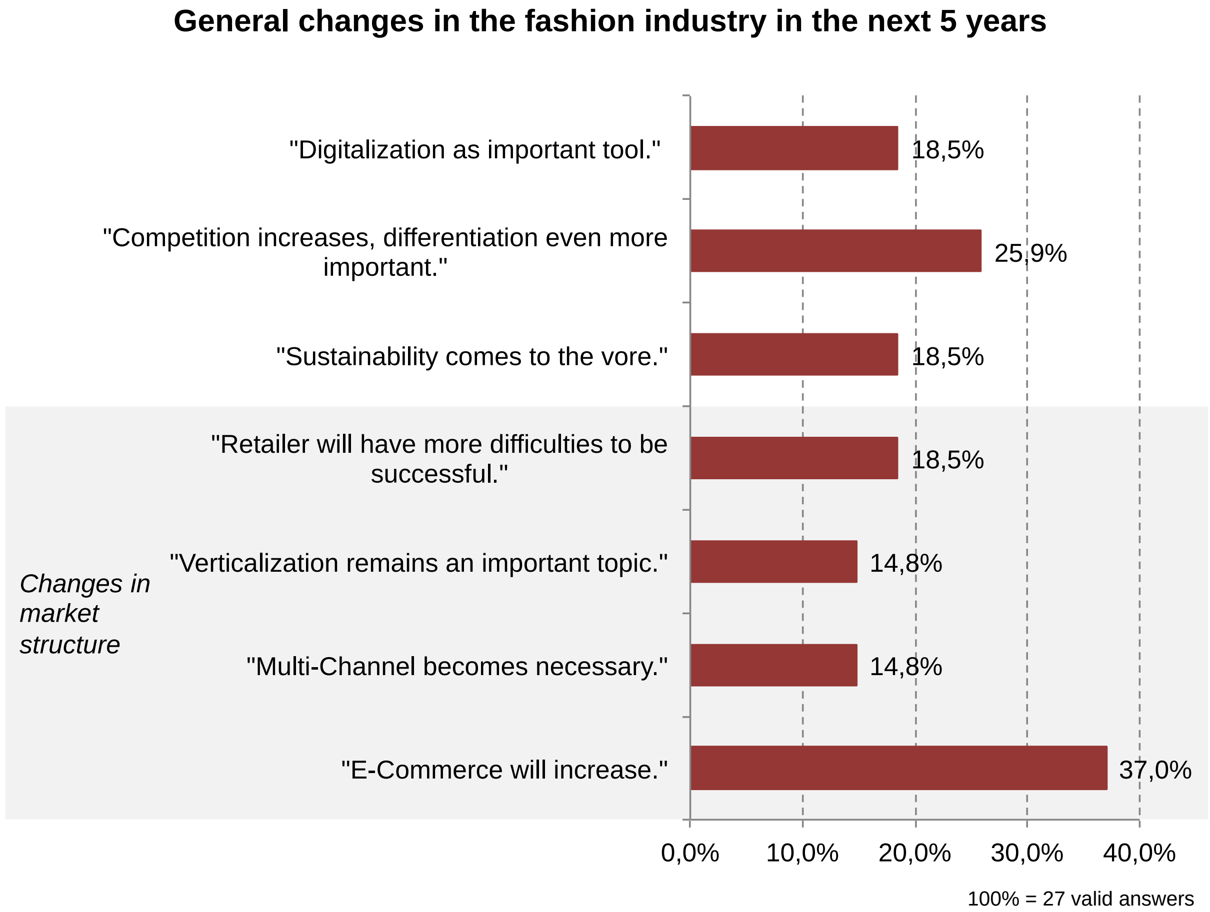

Figure 17: General changes in the fashion industry in the next 5 years

Findings in difficulties and future changes result in optimization potentials of customer segmentation models, which are supposed to be answered with the following question and its outcomes.

3.3.5 Optimization potentials in consumer segmentation

Concentrating on optimization potentials (compare Table 3, Q8), aspects in different main categories have been unfolded from 20 out of 30 answers: *individualization, data processing, theory vs. practice and segmentation criteria* (compare Figure 18).

In terms of *individualization*, 20% of the companies wish to focus more on individual customer preferences.

Of importance with regards to *data processing* is, according to 20% of the companies, the consideration of digitalization and verticalization in their segmentation. In the first instance, this means a linkage of online and offline information and the general provision of an increased information degree. Notwithstanding, one respondent concretely named the implementation of a system to use and apply the existing data in order to cluster the customers.

10% of the participants named a conflict between *theory vs. practice*. According to one participated company: “Many concepts are theoretically good, but difficult to apply in practice. This applies both to the technical concept realization as well as the utilization of findings for distribution“ (Laake & Höler, 2015, p. 108).

As the evaluation of optimization potentials in matters of segmentation criteria show, “the right criteria need to be recognized and defined in order to successfully design customer segmentation” (Laake & Höler, 2015, p. 108). Two companies admitted that lifestyle criteria are nowadays more important than demographic data. A multi-channel company declared, attitudes regarding price, quality and sustainability need to be optimized. In summary, for 30% a major potential lies in the identification of the right selective criteria.

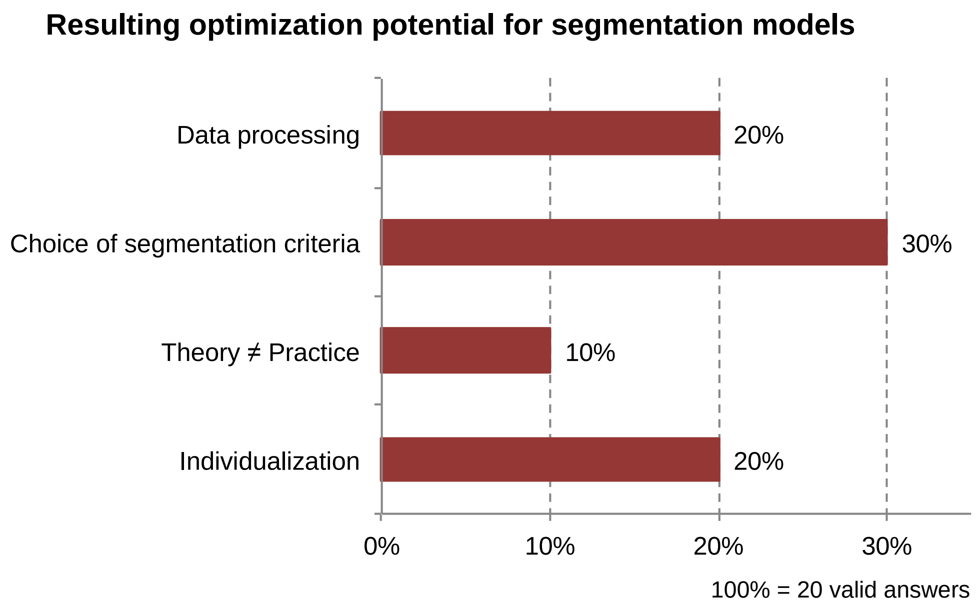

Figure 18: Resulting optimization potential for segmentation models

In general, it can be stated that potentials especially lie in the field of data processing since more data is available and needs to be used and applied efficiently (Klausnitzer, 2013, p. 10). The hybrid consumer has been thematized in this survey as well. The potential for improvement is more seen in individual concentration and a stronger focus on each consumer in order to successfully play on the market. Skibicki & Mühlenbeck come to the same conclusion in their paper, finishing with the statement that it is the millennium of mass individualization and at the same time the goodbye of target groups (Skibicki & Mühlenbeck, 2014, p. 175). Still, it is difficult to conclude from theory to practice, because more factors need to be taken into consideration. On the one hand, it is the disposability of data and on the other hand, the real challenge is to implement it in the individual company environment.

3.3.6 Validation of statements

The three key statements, which have been established in the introductory chapter 1.1, have been included in the empirical study as well. At this point, clear tendencies for each statement could be identified.

To begin with, the first statement intended to reveal the following:

#1 Consumer segmentation models are nowadays less relevant.

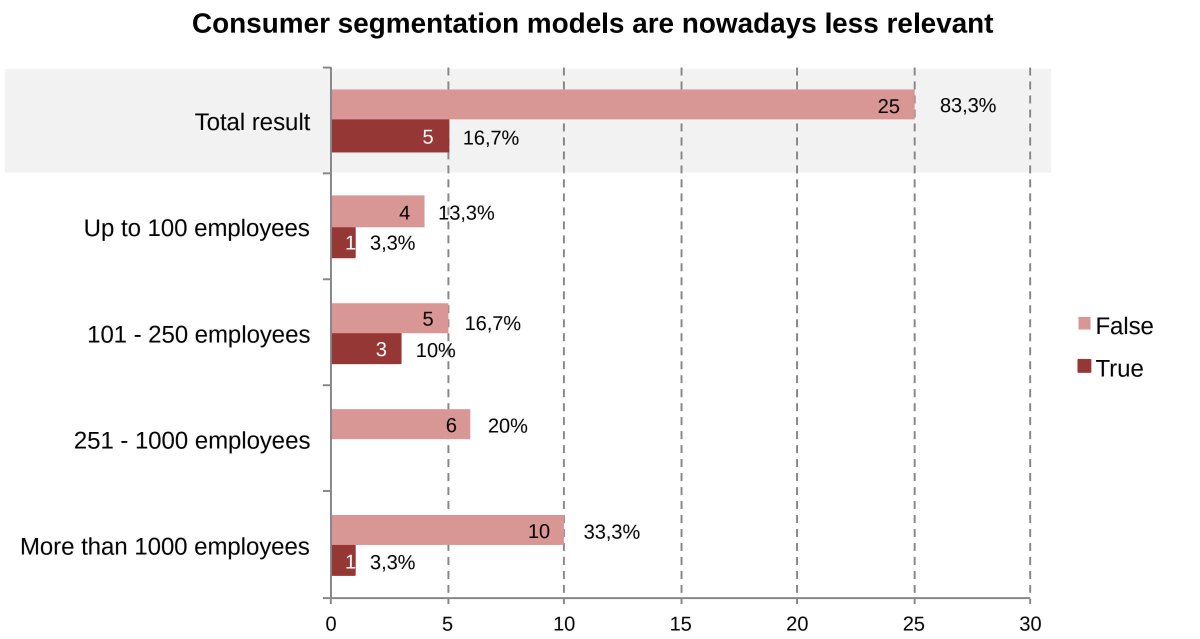

Figure 19: Evaluation of statement 1

As Figure 19 indicates, more than 80% of the respondents do not believe that consumer segmentation models are nowadays less relevant. Interestingly, the majority of participants who regard the statement to be true are rather small companies with fewer employees.

#2 Consumer segmentation models in Europe have a different focus than in the USA.

Statement two especially focuses on the key markets of this research project - Europe and the USA. 25 out of 30 companies agree with a difference between these markets in terms of consumer segmentation models and hence provide a clear opinion trend.

Even though, this statement achieves the same result (in %) as the other statements, it needs to be critically interpreted. Most of the companies only operate in the German market and consequently, do not have expertise in the segmentation of the U.S. market.

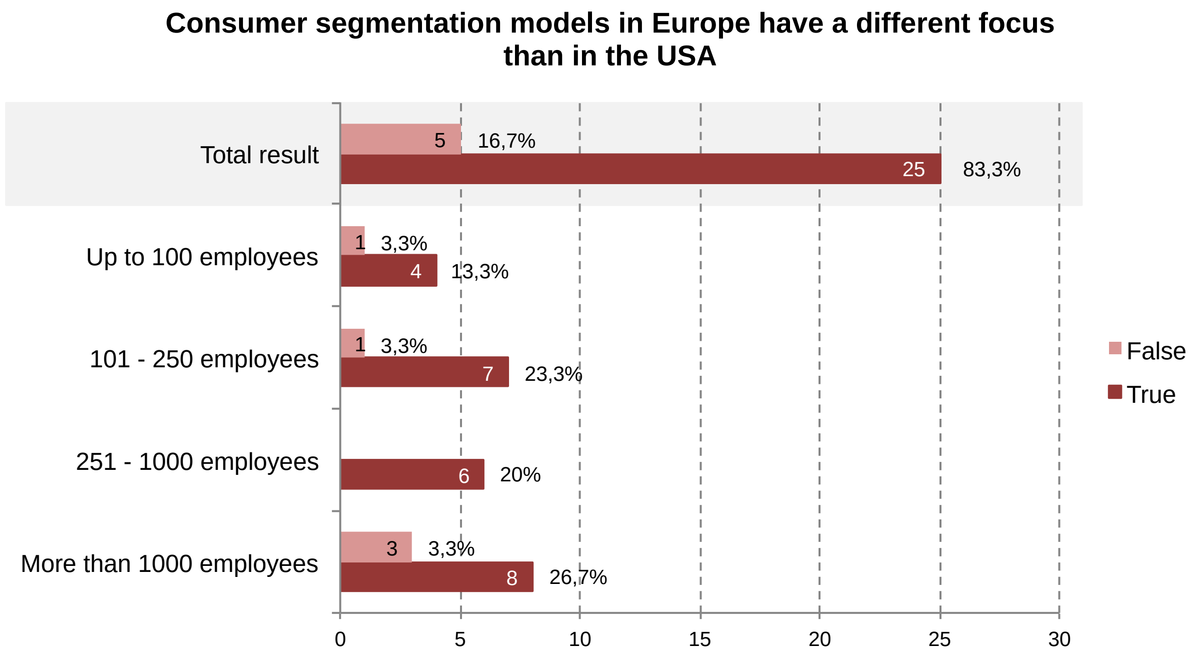

Figure 20: Evaluation of statement 2

#3 In the future, company's internal consumer segmentation models will increase in importance.

The third statement pursues the goal to picture a future trend.

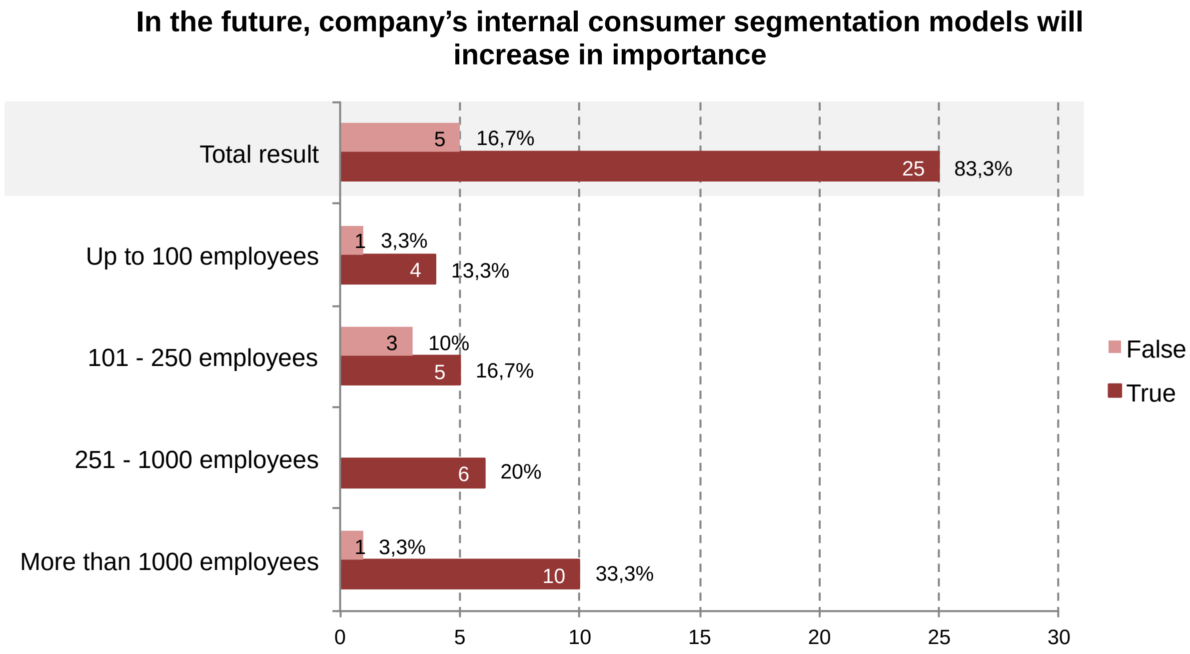

Figure 21: Evaluation of statement 3

The survey allows for a clear result: 83,3% are convinced that internal segmentation models will raise in importance for companies. This outcome poses the question, which position market research institutes will take on the market in the future?

3.4 Evaluation of empirical study results

Aims of the empirical study were to explain – according to the research question – today's relevance of consumer segmentation models. Analysis of each survey question has already been done in detail. In the following, general deductions will be provided, classified into three categories.

The first major aspect is the result of the applied **segmentation type in practice**. 17,2% of companies use external consumer segmentation models exclusively and 31% in total (external or mixture). Doubtlessly, this reveals the minor importance of external models. This result is in line with statement three and its finding ("In the future, company's internal consumer segmentation models will increase in importance.”). 83,3% argue for an increased future importance of internal segmentation models. Supported and strengthened are these results by the evaluation of statement one (“Consumer segmentation models are nowadays less relevant.”). At this point, 83,3% are convinced that the statement is wrong. They indicate, segmentation models are still relevant today, but internal ones seem to evolve status quo for the future. These findings are of valuable nature for the following final discussion and evaluation.

Apart from that, it is striking that multiple **difficulties and expected future changes** are named. Interestingly, answers regarding optimization potentials, which could and should be related to challenges and changes, do not address any improvements or solutions on how to fight these aspects. For many companies, the linkage between their problems and resulting optimization potentials is not considered; at least it does not appear in such manner.

The third aspect of analysis results is related to interrelations between company size and applied types of segmentation models.

Table 4 serves as an overview for the most striking observations. Key findings of this table are, first of all, the trend for internal segmentation in companies with up to 100 employees (4 of 5 companies, 80%), 101-250 employees (7 of 8 companies, 87,5%) and in companies with more than 1 000 employees (8 of 11 companies, 72,7%). In rather small companies, cost reasons can be assumed. The question arises whether an external segmentation model is profitable at his point.

This trade-off leads to further questions, which can be directed to the return on investment and the questionability whether consumer segmentation deploys priority number one in a company.

In matters of big companies (more than 1 000 employees), efficiency reasons can be hypothesized. These systems probably hold a well-grounded, data-based processing. As results expose, in companies of a size between 251 and 1 000 employees, the use of external segmentation models is predominating (4 of 5 companies, 80%). Potential reasons could be the possibility to afford the costs for the acquisition of an external model and on the contrary, a too great complexity to implement an own internal segmentation model.

	up to 100 employees		101-250 employees		251-1000 employees		1000 employees		Total	
	firms	%	firms	%	firms	%	firms	%	firms	%
No segmentation model	4	13,8%	6	20,7%	1	3,4%	4	13,8%	15	51,7%
Yes, intern only	0	0%	1	3,4%	0	0%	4	13,8%	5	17,2%
Intern total	**4**	**13,8%**	**7**	**24,1%**	**1**	**3,4%**	**8**	**27,6%**	**20**	**69,0%**
Yes, intern & extern	1	3,4%	1	3,4%	1	3,4%	1	3,4%	4	13,8%
Yes, extern only	0	0%	0	0%	3	10,3%	2	6,9%	5	17,2%
Extern total	**1**	**3,4%**	**1**	**3,4%**	**4**	**13,8%**	**3**	**10,3%**	**9**	**31,0%**
Total	**5**	**17,2%**	**8**	**27,6%**	**5**	**17,2%**	**11**	**37,9%**	**29**	**100%**

Table 3: Type of segmentation model by company size

4 Discussion and management implications

The former chapters reviewed, analyzed and shed light on results that form a relevant significance for both theory and practice.

Are there similarities between practical evidence and literature findings concerning the relevance of consumer segmentation models nowadays?

In a first step, findings of literature and empirical study will be contrasted and critically judged related to the former established statements. In a second step, concrete management implications will be provided in order to answer the research question.

#1 Consumer segmentation models are nowadays less relevant.

As literature has demonstrated, the “classical” socio-demographic segmentation became less relevant in the past since it does not provide detailed and meaningful information about the consumers’ buying behavior, which recently came to the fore segmenting individuals. In contrast, psychographic criteria, as well declared as “modern market segmentation”, gained in importance. Scientific literature indicates that lifestyle criteria that shed light on observable behavior (e.g. free time activities, habits) and psychological variables (e.g. attitudes, values) grabbed attention. This change can be traced back to the fact that consumers developed to be more demanding. Socio-demographic criteria have not been sufficient enough to indicate their preferences. In this context, Big Data plays a decisive role for future segmentation of consumers. It enables companies to improve targeting of customers and to tie in with consumers’ strive for individualization – personalized offerings!

In general, it enriches knowledge about consumers and enables a new perspective on the market resulting in the possibility to sharpen the consumer behavior’s predictability. Nevertheless, findings suggest topics that can be explored further since concrete statements regarding the status quo of management implications and practical relevance are not thematized in literature so far.

Critical reflection of empirical study results has shown that companies do not think consumer segmentation models are less relevant in today’s world. Statements rather revealed that they do look into the subject of segmentation. It is present in their minds as given answers mirror. At this point, it can be differentiated between open-minded enterprises and latecomer companies. Open-minded enterprises' opinion goes along with the one in literature, supporting the decrease of classical market segmentation and the rise of psychographic segmentation and Big Data. In contrast, latecomer companies still concentrate on and prefer socio-demographic segmentation criteria.

Key conclusion for this statement is the clear tendency, both mirrored in literature and empirical evidence: The relevance of consumer segmentation models persists.

#2 Consumer segmentation models in Europe have a different focus than in the USA.

Literature investigation has illustrated that segmentation models representing the American market predominantly make use of geo-demographic classification. On the contrary, Europe is rather prevailed by psycho-demographic approaches. These circumstances call for a critical view on reasons for this phenomenon. A possible reason may lie in the different market sizes. On the grounds that the USA is one large market, but consequently possesses a multiplicity of ethnically different population groups, it is highly heterogeneous. At this point, the advantages of geo-demographic segmentation take effect and enable a quick and cost-efficient data collection. Although Europe consists of many small markets, each of it is within itself more homogeneous. This fact results in a different segmentation method with focus on psycho-demographic approaches.

Critical reflection of empirical research findings illuminated that a clear majority is of the opinion, European consumer segmentation models have a different focus than the ones in the United States.

Taken everything into account within this statement, it can be recorded that literature is in line with the empirical study results.

#3 In the future, company's internal consumer segmentation models will increase in importance.

Literature concerning internal segmentation models can be seen in the context of Big Data. A multiplicity of research articles can be found when it comes to future possibilities of an improved and more selective consumer segmentation. Big Data is named as key element that will push forward companies' internal data usage. It provides further information about the consumer and enables a more concrete consumer addressing.

Analysis of the empirical study revealed that more than 80% of respondents either solely use internal segmentation or a combination of internal and external classification models. This clear tendency explicitly mirrors future scenarios regarding the development of internal segmentation. Only one-third in total makes use of external segmentation approaches. At this point, the critical question arises, which kind of model will bring the best outcome for companies? It is internal versus external segmentation. While external models provide fundamental quality and a larger sample size, internal segmentation approaches especially enable a more specific, individually customized information basis about own customers. In any case, high costs are involved and in the end, it is as often a matter of individual discretion.

It becomes clear that internal consumer segmentation models will increase in importance. Although, in the future, market researchers will get in on the segmentation of consumers and the corresponding target market. However, the value of companies' databases will doubtlessly increase in importance.

Having juxtaposed and evaluated literature and empirical study results by means of the prior constructed statements, it is time to relate them to the basic research question:

In how far is the relevance of consumer segmentation models due to changes in consumer behavior, technology and market structure still given?

In general, it can be stated that the named changes in the research question are thematized both in literature and the empirical study. Segmentation models can still be regarded as relevant. Nevertheless, present changes demand a rethinking: Managers need to change the way of *how* to do consumer segmentation.

Concrete management implications lie in three main fields: *data, target group and models*.

1. **Data**

Nowadays, customization is possible if companies both now and in the future tap the full potential of customer data. This valuable factor has already been recognized by companies but has not yet found concrete application and implementation to a maximum of the possible scope. Most notably, strategies and systems need to be developed and established in order to take a maximum of efficiency out of it.

2. **Target group**

The second management implication ties in with the already named aspect in the *data* context - target group!

Besides the multiplicity of lifestyles, an increasing hybrid and multi-optional consumer behavior challenges companies to adequately adjust their operations to their target group. Especially the highly competitive and fast-moving fashion market, where trends need to be recognized before they become accepted, requires a profound understanding of customers. This fact portrays an urgent need for companies to deal with customers' requirements and desires and to not only use socio-demographic segmentation criteria, as the majority of participated companies does. Only companies that know their customers can achieve an unique selling proposition for their individual target groups.

3. Models

As a third issue for practical implications, already existing segmentation models of research institutes and companies shall be illuminated. A clear tendency for the usage of internal segmentation models of companies in practice raises the question: How relevant will be external, research institute based, and existing segmentation models in the future?

It can be stated that external segmentation models are and will be relevant. Internal segmentation models may be sharper when applied in the right manner. However, they cannot provide a 360° view including a simultaneous analysis in that depth and breadth of competitors as external research companies can. Only specialists can assure to provide a comprehensive view on the fashion market with benchmarking different companies and summarizing them in a segmentation model of high quality.

In conclusion, consumer segmentation models are not more or less relevant, they are relevant in a different manner. As business and economic circumstances change, the appropriateness of consumer segmentation models should be revisited periodically to ensure that the correct option is in use for the present and the near-term future.

5 Conclusion, limitations and foresight

Changes in consumer behavior, technology and market structure have posed the question if the business practice of consumer segmentation by means of conventional models is still given. The aim of this research paper was to critically reflect on the relevance of consumer segmentation models in the fashion industry. Literature review served as background for segmentation model development and implementation while the empirical study aimed to shed light on practice as well as to critically judge and give value to the literature findings and assertions.

The outcomes of the literature review claimed that the American market is dominated by geo-demographic segmentation, whereas the focus in European countries is set on consumer classification by means of lifestyles. Surprisingly, fashion specific segmentation models could almost only be identified in the German market. Big Data turned out to be the key element that not only sought special consideration for future segmentation in literature, but also in practical application at different companies that participated in the empirical study.

The empirical study aimed to get valuable insights in the status quo in practice and to illuminate how companies operate in terms of consumer segmentation. Generally, it can be recorded that literature findings are in line with survey outcomes. Results show that in terms of segmentation practices, internal classifications already are and will be of special relevance in the future. In this context, the three established statements are inherently consistent and feature clear tendencies.

In the face of discrepancies, limitations and challenges, language barriers were carried with the analysis of consumer segmentation models in literature. Apart from that, only limited information on selected segmentation models could be found or detailed documents had to be acquired for high monetary amounts. Besides, information about some models could solely be found on the institute’s website; hence subjectivity can be assumed.

It is indispensable to consider that a basic population could not be defined since some companies operate on a national level, others on an international one. Nevertheless, identified research gaps and practical implications suggest topics that can be explored more detailed.

On a scientific level, future investigation could be directed toward further examination of strategies and potentials that emerge from expected future changes especially in the field of technology, market structure and consumer behavior.

The inclusion of additional companies, hence a larger sample size, provide potential for a more extensive analysis. Another window for future research lies in the field of a more detailed investigation of how internal segmentation models in companies look like in detail.

In general, one needs to be aware of the fact that every company has individual requirements. This is not only valid for the segmentation models in general, but also for the type of the model (internal or external segmentation). Hence, it is difficult to provide universally valid management implications.

As a summary of results, the prior set research question "In how far is the relevance of consumer segmentation models due to changes in consumer behavior, technology and market structure still given?" can clearly be answered. As literature and empirical study have proven, consumer segmentation models are still relevant. Appropriate classification models can be regarded as a roadmap to success if companies know their target group and if they are able to address it. Current changes need to be considered and the corresponding segmentation needs to be deduced for every enterprise individually.

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